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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/653,997

09/04/2003

Katsuhiko Miki

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05/26/2006

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

KOHNER, MATTHEW J

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/653,997	MIKI, KATSUHIKO	
	Examiner	Art Unit	
	Matthew J. Kohner	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 55-78 is/are pending in the application.
- 4a) Of the above claim(s) 55-65, 68, 70, 72, 74, 76 and 78 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 66, 67, 71, 73, 75 and 77 is/are rejected.
- 7) ☒ Claim(s) 69 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 66, 67, 71, 75 and 77 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,278,858 to Suga et al. (*hereinafter* “Suga”).

In regard to claims 66, 67, 71, 75 and 77, Suga discloses an image forming apparatus comprising:

- an image forming device (col. 1, line 10);
- a sheet feeding device configured to convey a sheet to said image forming device,

wherein said image forming device is configured to form an image on the sheet conveyed from said sheet feeding device, and said sheet feeding device includes a feed roller (51) and a separation member (53), said separation member being pressed against and into contact with said feed roller with a pressure applied between said feed roller and said separation member, wherein a plurality of the sheets conveyed between said feed roller and said separation member are separated and conveyed one by one to said image forming device; and

- a pressing device (91) configured to cyclically provide a change in the pressure applied between said feed roller and said separation member while conveying a sheet between said feed roller and said separation member (col. 7, line 37 – col. 9, lines 45).

wherein said sheet separation member is a reverse roller upwardly and elastically supported by an axis, said axis being rotated by a driving gear and a gear engaged with said driving gear and supported at one side thereof (See e.g. Fig. 2-5), said reverse roller being arranged at a free end side of said axis via a torque limiter (31), so as to be rotated in a sheet feeding direction and a direction opposite the sheet feeding direction (col. 7, lines 21-25).

In regard to claim 67, see Fig. 3 where pressing member (91) at the side of separation roller (53).

In regard to claim 71, Suga discloses a sheet guide (see Fig. 2).

In regard to claims 75 and 77, Suga discloses a torque limiter (62).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suga.

In regard to claim 73, Suga does not specifically disclose that the feed roller, friction roller and pressing unit are integrally constructed as a unit. However, Suga does disclose the claimed invention except for the integral construction. It would have been obvious to one of

Art Unit: 3653

ordinary skill in the art at the time the invention was made to have constructed the parts integrally since it has been held that forming in one piece an article that formerly has been formed in several pieces and put together involves only routing skill in the art. *Howard v. Detroit Stove Works* 150 U.S. 164 (1893).

Response to Amendment

Applicant has amended the independent claims to include the limitation of the pressing device cyclically providing a change in pressure, “while conveying a sheet between the feed roller and said separation member,”

In view of the Applicant’s amendments, the previous rejection is overcome. Further, in view of Applicant’s arguments regarding the application’s definition of “cyclically” the Examiner agrees the Yamauchi reference did not meet the claim language in regard to cyclically changing the pressure. Therefore, this action is non-final.

Allowable Subject Matter

Claim 69 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kohner whose telephone number is 571-272-6939. The examiner can normally be reached on Mon-Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571-272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew J. Kohner
Examiner
Art Unit 3653

mjk


GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER